WS19.1 Using microsystems methods to improve nutritional outcomes in an adult CF center: a quality improvement (QI) initiative

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Objectives: A global aim was to become one of the top 10 best performing centers in the US based on pulmonary and nutritional data; our specific aim is to reduce the percentage of patients at nutritional risk not seen by our registered dietician (RD) by 10% over a 3 month period (quarter #3, 2011). We chose this project because, based on our center specific data from the CF Foundation registry, at our program the percentage of patients at nutritional risk seen by a dietician (58%) was well below the national average (82%).
Methods: We assembled an interdisciplinary core team consisting of dietician, social worker, physicians, and nurse practitioner; a 5-member patient advisory board was recruited to identify patients' priorities for improvement. We used the Plan-Do-Study-Act (PDSA) approach. PDSA #1: examination of our clinic flow, to identify any inefficiencies. Flow started with our Monday team meeting, and ended with our after-clinic wrap-up. Our Monday meeting was used to target patients for RD to see that week. Over a 3-month period we were able to identify and intervene for those patients needing dietician expertise.
Conclusions: Our data reflected a significant improvement: in quarter3, 2011 (30%) compared to the annual data from 2009(58%). Lessons learned included standardizing the way in which heights and weights are recorded; focusing our team meeting; implementing changes in clinic flow (process). These lessons are included as standard procedures ("playbook"). PDSA #2: survey of patients to identify their priorities for our process. PDSA#2 data are pending. Lesson learned: patients are eager to participate in our program QI.
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WS19.2 Development and application of quality improvement questionnaire in adults with cystic fibrosis

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Background: Understanding quality of care is an important aspect of the management of patients with cystic fibrosis. We developed a questionnaire to examine CF patients' perceptions of inpatient and outpatients care received in our CF unit.
Methods: Focused interviews with CF patients, their caregivers and members of the CF team were carried out examining factors that influence perceived quality of care. A 30-question questionnaire was developed addressing inpatient and outpatient experiences, compliance with treatments, CF knowledge and patient demographics. Questionnaires were then administered prospectively to patients attending St. Vincent's University Hospital Adult CF Unit. All questionnaires were anonymous.
Results: Of 160 CF patients approached to participate, 113 (71%) responded and completed the questionnaire. Fifty six percent were male, 40% of participants had FEV1 <40% predicted. Overall 71% were satisfied with quality of care with 20% neither satisfied nor dissatisfied. Main reasons for dissatisfaction related to issues with inpatient facilities. Impediment to admission to hospital included concerns about cross infection (23%), lack of availability of single rooms (18%) and wish for home IV therapy (22%). The most common reason for missing clinic and annual review appointments was due to inability to take time off because of work/school commitments (39%).
Conclusions: Overall, patients expressed satisfaction with perceived quality of care. Impediments to attending clinic visits and admission to hospital were identified and are being addressed as part of ongoing local quality improvement.

WS19.3 Transforming clinics to support adherence: an exercise in continuous quality improvement

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Background: Continuous quality improvement (CQI) is embedded in the US approach to CF care [1]. In adopting CQI we aim to move from a rescue based treatment paradigm to an approach based on prevention by an iterative cycle of adherence improvement. Much adherence support occurs in the outpatient clinic and we used CQI to reduce waiting times and maximise patient contact time to provide an optimum environment for relationship building and adherence interventions.
Method: The Clinical Microsystems approach was employed. The outpatient process was mapped. Clinic cycle times were measured so that arrival time and the time to each MDT contact was logged allowing waiting and clinical contact times to be understood. In keeping with the Microsystems approach when we used our data on MDT contacts to schedule appointments rather than scheduling around the median consultation time we planned to the 80th centile. We then used an iterative plan do study act (pdsa) cycle to identify and eliminate sources of waiting.
Results: Prior to the intervention in May 2011 the mean clinic cycle time was 83 minutes with a waiting time of 40 minutes and clinical contact time of 43 minutes (52% contact time). After CQI in November 2011 the mean cycle time had reduced to 59 minutes with a waiting time of 8 minutes and a contact time of 51 minutes (87% contact time).
Discussion: Frustrated patients are known to be less adherent. Removing most of the waiting time from clinic has improved patient satisfaction and provided a calm unhurried environment which enhances relationships and supports adherence. The techniques of CQI were fundamental in achieving transformation.

Reference(s)

[1] Thorax 2011;66:1106–1108.

WS19.4 CF quality improvement program: a pilot phase to experiment the US QIP approach in France

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Background: The French CF Patients Registry shows variability among patients outcomes in the 49 CF Centres. Referring to the US QIP, microsystem approach is experienced to improve quality of CF care in France.
Objectives:

i. Ascertain applicability and effectiveness of clinical microsystem approach for CF care improvement in France
ii. Adapt the methodology for Teams full ownership.

Methods: QIP organization: national coordination by Nantes Expertise Centre; selection of 7 CF Pilot Centres (n = 1000 patients out of 5700 in the French registry); Transparency of outcomes between the Pilot centres; QIP steering committee in each Pilot Centre including a patient/parent and a "Quality Referent"; Release of a French QIP Action Guide and a Patient Registry report with 10 goals and advice to meet them; Set up a web collaborative environment; Support from the US CFF and The Dartmouth Institute.
One year curriculum: 3 face-to-face meetings, 5 intermediate WEBEX sessions, as many Team coaching phone meetings as needed, 1 benchmarking visit in a high performing Centre.
Pilot Phase Evaluation, before the national deployment, carried out by an external researcher and based on:

i. Key indicators as professionals & patients representatives satisfaction, Teams participation rate, completion of phases, PDSA cycles achieved
ii. focus group and individual interviews
iii. patients outcomes.

Conclusions: Clinical microsystem approach seems appropriate in France with some adjustments in the support organization. The part time resource designated as the "Quality Referent" in each centre is paramount. Data on effectiveness and patients outcomes (FEV1, BMI) will be available by June 2012.